PAVEMENT MANAGEMENT PROGRAM (PMP)

August 4, 2009

State Law

- In accordance with Section 2108.1 of the California Streets and Highway Code every City was required by July 1, 1990 to develop and adopt a pavement management program (PMP) to be utilized for managing local streets or highways that receive funding under the State Transportation Improvement Program (STIP).

- All arterial/collector streets must be re-inspected every two (2) years and the PMP updated.

STIP Funds

- STIP is a multi-year capital improvement program that is funded with the revenues of the Transportation Investment Fund and other sources.

- The program is managed by Caltrans.

- Guidelines for locally administered projects are available here: http://www.dot.ca.gov/hq/LocalPrograms/lam/prog_g/g23stip.pdf

What is Pavement Management?

- Pavement management is a system or methodology to develop cost effective maintenance and repair alternatives for roads and streets.

- It uses a combination of existing surveyed pavement defects, road classification, and traffic volumes to assign a pavement condition index (PCI) to each street which is used to determine the most cost-effective maintenance treatment needed.

PMP Software: MicroPAVER

- Originally developed in the late 70's by the US Army Corps of Engineers to help the Department of Defense manage its vast inventory of pavements.

- It uses inspection data and a pavement condition index (PCI) rating from zero (failed) to 100 (good).

- It is the most widely used pavement management software in the public sector.

MicroPAVER Capabilities

- Develop and organize pavement inventory

- Assess the current condition of pavements

- Develop models to predict future conditions

- Report on past and future pavement performance

- Develop scenarios for maintenance and rehabilitation (M&R) based on budget or condition requirements

- Plan projects

Pavement Condition Index (PCI)

- The PCI of a street is a ranking of its health based on the severity of its defects.

- Streets are surveyed, and defects are quantified. These observations are entered into MicroPAVER and a PCI number is generated.

- For example, a newly paved street would have a PCI of 100. A 50-year old street with large cracking and many potholes would have a PCI of 10 or less and would need total reconstruction.

Pavement Condition Curve
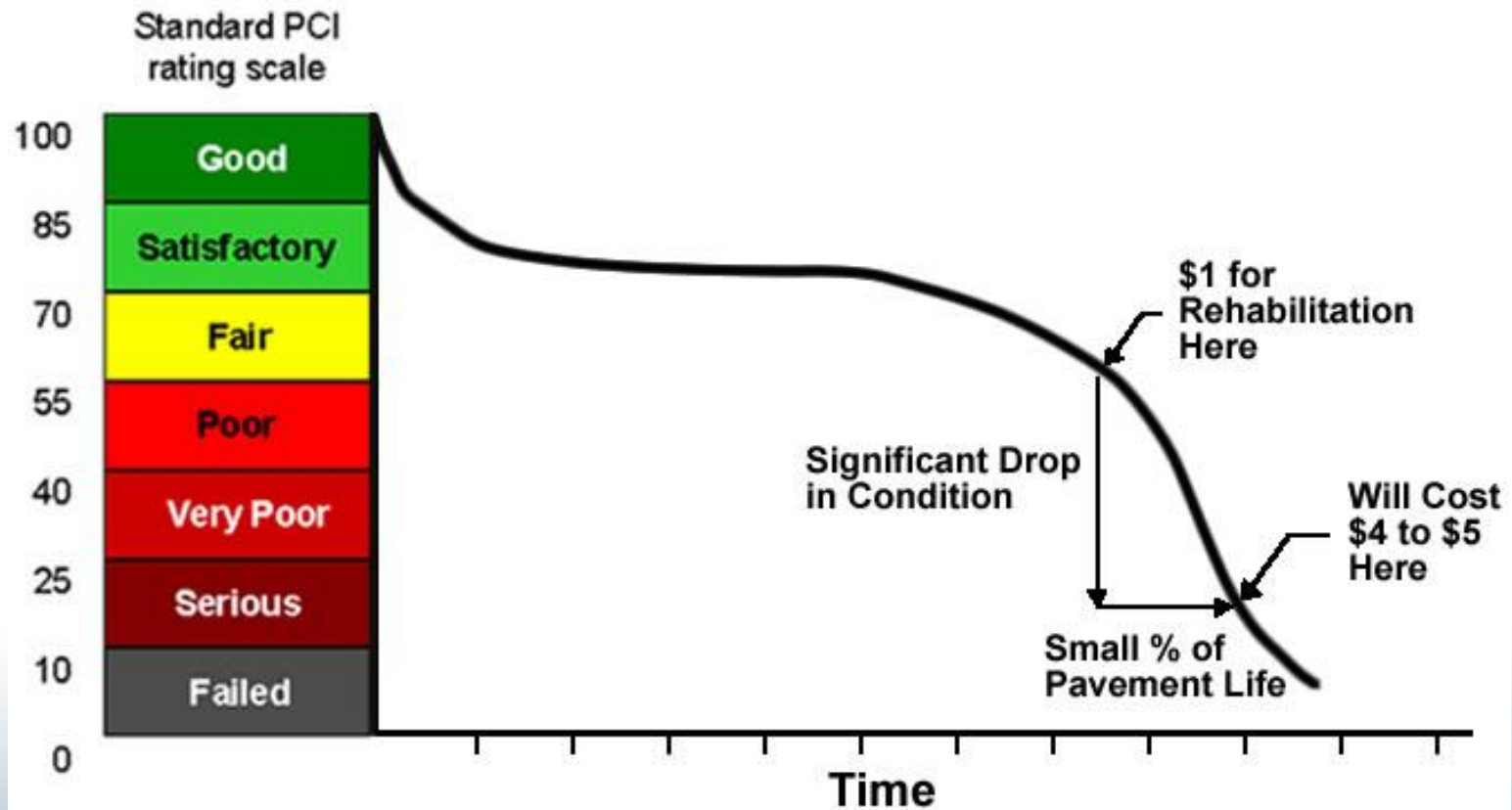
City's Assets

Beverly Hills has approximately 152.2 miles of paved surfaces comprising of:

- 68.6 miles of residential streets $93.5M

- 23.1 miles of arterial streets $44.4M

- 18.5 miles of collector streets $30.4M

- 42.0 miles of alleys $31.0M

152. 2 Total miles with a total replacement value of $199.3M

Street Selection/Engineering

- PMP is used as a planning tool. It helps select eligible streets for maintenance treatments.

- Staff verifies what streets can be saved with an overlay before full reconstruction is needed.

- Before streets are overlaid, staff verifies that there are no pending sewer, utility, or major private development projects planned that would result in cutting the new pavement.
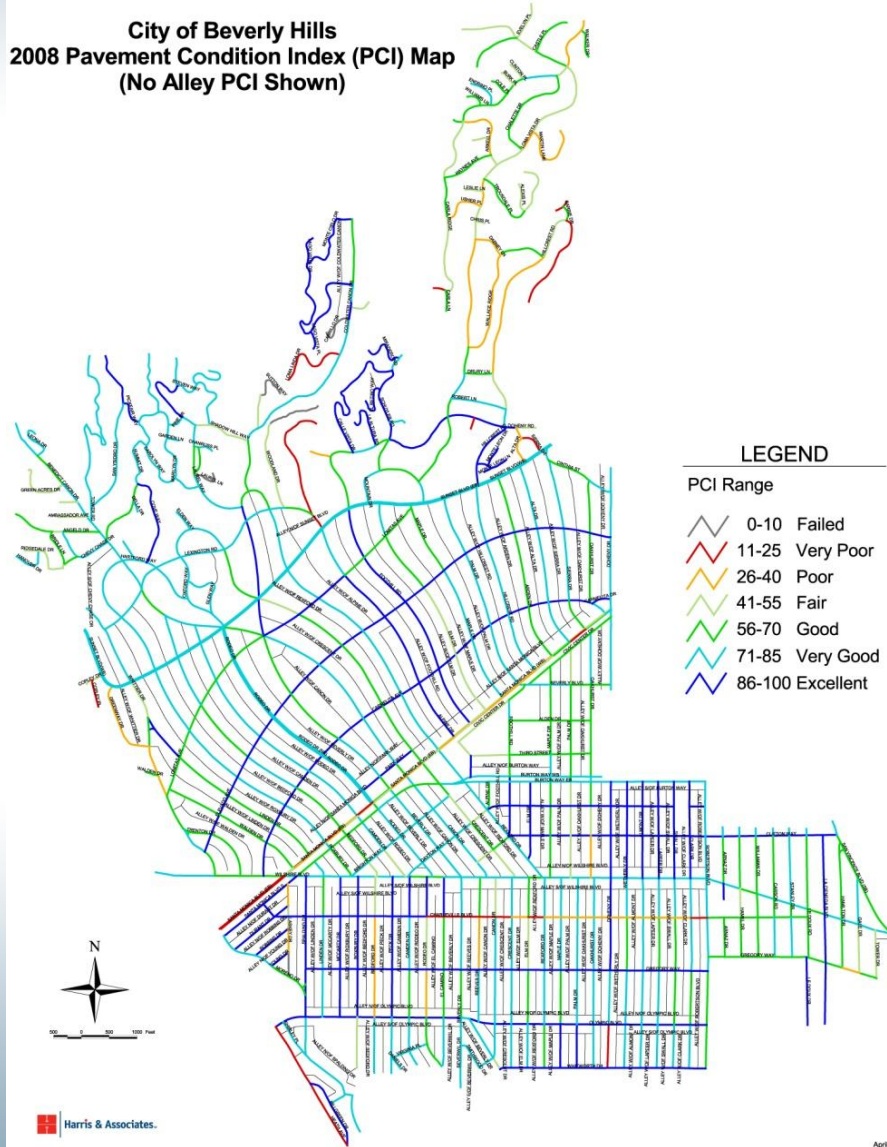
Street Resurfacing 2006-2009
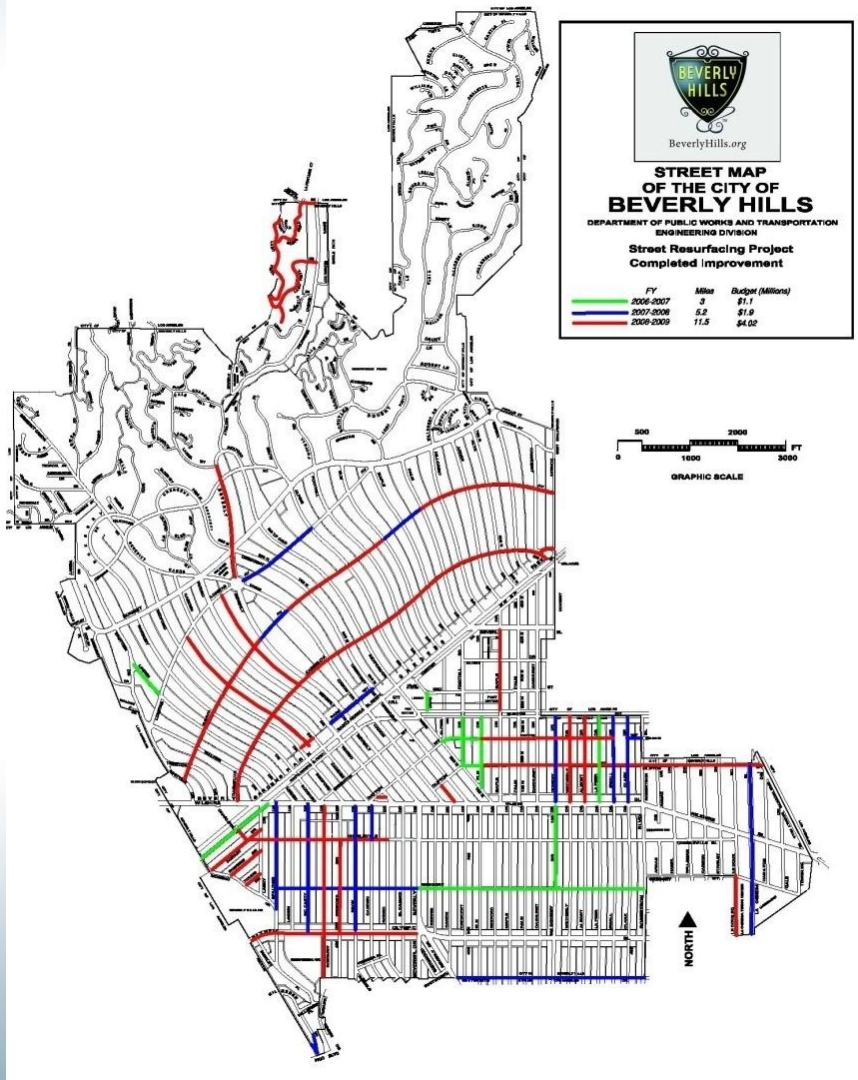
- In December 2007, the City's average PCI was 70 for streets and 52 for alleys (after 3 miles were paved in FY06-07 with $1.1M budget).

- In April 2009, the City's average PCI was 73 for streets and 45 for alleys (after 16.7 miles were paved in FY07-09 with a $5.9M budget).

Current PCI Conditions

City of Beverly Hills
2008 Pavement Condition Index (PCI) Map
(No Alley PCI Shown)

PCI per Year

Pavement Conditions Index (PCI)

Paving FY 2006-2007

Gregory Way
(East of Beverly Dr.)

Santa Monica Blvd. S. Roadway
(West of Wilshire Blvd.)

Street Resurfacing 2007-2008

Gregory Way
(West of Beverly Dr.)

Whitworth Dr.

Carmelita Ave.

07/15/2009 14:08

Olympic Blvd.

06/09/2009 13:05

How Do We Compare?

Our current PCI for streets only (no alleys) is 73.

- Culver City 40(2005 MTA study)
- Los Angeles 62 (2008 LA report)
- Los Angeles County 61 (2005 MTA study)
- Santa Monica 70 (2005 MTA study)
- Torrance 40 (2005 MTA study)
- West Hollywood 50 (2005 MTA study)

Recommended Funding

- To maintain our current street PCI of 73 over the next 5 years, approximately $4.5 M per year would need to be budgeted.

- To maintain our current alley PCI of 45 over the next 5 years, $1.0 M per year would need to be budgeted.

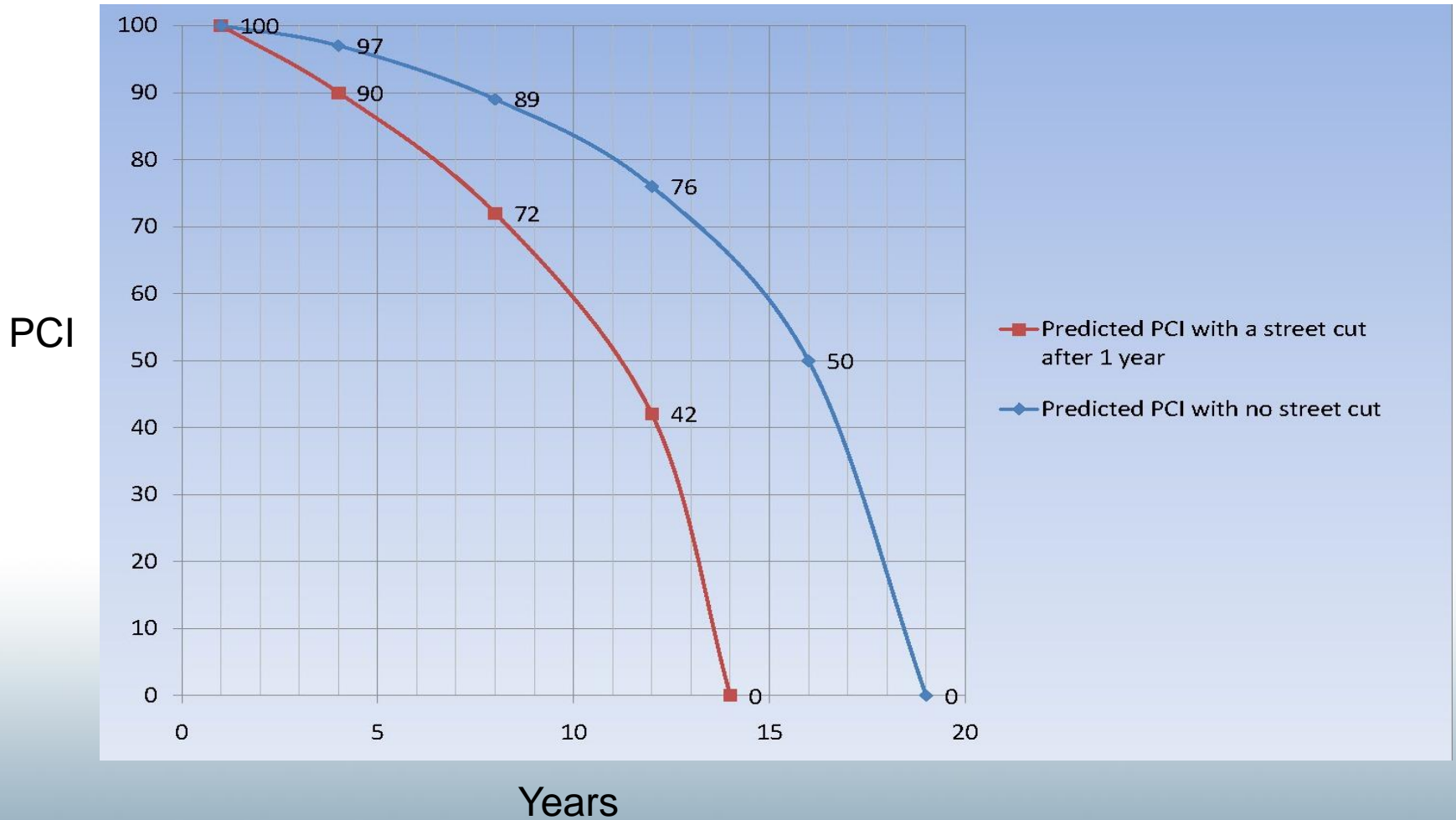A total of $5.5 M per year is recommended funding to maintain our current street and alley conditions.

Grant Funds

- Prop. 1B funds (initial disbursement):
  $580,387 already spent on paving in FY 2008-09

- Prop. 1B funds (final disbursement):
  $536,437 are allocated for expenditure in FY 2009-10

- ARRA funds:
  $1,059,000 are allocated for expenditure in FY 2009-10

Street Cuts

Predicted Pavement Life

- No excavation permits will be issued on newly constructed or renovated streets for 5 years after the filing of a Notice of Completion.

- Exceptions:

  1) Emergencies endangering life or property

  2) Material interruption of utility service

  3) New service to a building

  4) Mandated by city, state, or federal legislation

  5) Best interest of general public.

"Pavements should be managed, not simply maintained!"